

**CALIFORNIA ENERGY COMMISSION**  
**NOTICE OF PROPOSED ACTION**

**FOR PROPOSED AMENDMENTS TO**  
**CALIFORNIA CODE OF REGULATIONS, TITLE 20:**  
**DIVISION 2, CHAPTER 4: ENERGY CONSERVATION,**  
**ARTICLE 4: APPLIANCE EFFICIENCY REGULATIONS**

**and**

**CALIFORNIA CODE OF REGULATIONS, TITLE 24:**  
**PART 6, SUBCHAPTER 2: BUILDING STANDARDS**

**Docket No. 01-AB970-APSTD**

**November 2001**

NOTICE IS HEREBY GIVEN

The California Energy Commission (Commission) is proposing to amend its appliance efficiency regulations and corresponding provisions in its efficiency standards for residential and nonresidential buildings. The amendments are to regulations in Chapter 2, Subchapter 4, Article 4, Sections 1601 through 1608 of Title 20, and Part 6, Subchapter 2, Sections 110 and 111 of Title 24, of the California Code of Regulations.

PUBLIC HEARING

The Commission will consider adopting the proposed amendments at a public hearing:

Wednesday, January 9, 2002  
10 a.m.  
CALIFORNIA ENERGY COMMISSION  
Hearing Room A  
1516 Ninth Street  
Sacramento, California  
(Wheelchair Accessible)

In addition, the Commission's Efficiency Committee (Commissioner Robert Pernell, Presiding Member, and Commissioner Art Rosenfeld, Associate Member) will hold a hearing on the proposed amendments:

Monday, December 17, 2001  
10 a.m.  
CALIFORNIA ENERGY COMMISSION  
Hearing Room A  
1516 Ninth Street  
Sacramento, California  
(Wheelchair Accessible)

At the hearings any interested person may make oral or written comments on the proposed amendments.

#### WRITTEN COMMENTS

In addition, any interested person may submit written comments on the proposed amendments. **Written comments must be received by the Commission no later than 5 p.m. on Monday, January 7, 2002, or at the public hearings. However, we request that written comments be submitted by January 7, 2002 so the Commission may more fully address the comments prior to the hearing.** Written comments shall be delivered or mailed to the following address:

Docket No. 01-AB970-APSTD  
CALIFORNIA ENERGY COMMISSION  
Docket Office  
1516 Ninth Street, MS-4  
Sacramento, California 95814-5512

All written comments shall be titled "Docket No. 01-AB970-APSTD"

#### PREVIOUS COMMENTS AND TESTIMONY

The Commission previously considered amendments to its appliance efficiency and building standards in Commission Docket No. 00-AB970-APSTD. Oral and written comments regarding those amendments were received and considered by the Commission in formulating the proposed amendments that are described in this Notice, which by this Notice is issued for a new 45-day review and comment period. Therefore, **comments made before the publication of this Notice will not be considered in this proceeding unless they are repeated in an oral or written comment submitted in this proceeding as described above.**

#### AVAILABILITY OF MODIFIED AMENDMENTS

Following the Committee hearing and the written comment period, the Commission may adopt the proposed amendments substantially as described in this notice. If substantial modifications are made, and they are sufficiently related to the originally-proposed amendments, the full modified text with changes clearly indicated will be made available to the public at least 15 days before the Commission adopts the amendments [per Government Code Section 11346.8(c)]. A notice of the availability of any such text will be mailed to all the persons to whom this notice is being mailed; in addition, copies may be requested from the contact person identified below. The Commission will accept written comments on any such modified text for at least 15 days after the text is made available to the public.

## AUTHORITY AND REFERENCE

The Commission proposes to adopt the amendments under the authority of Public Resources Code Sections 25213 and 25218(e). The proposed amendments would implement, interpret, and make specific Public Resources Code Sections 25402(a) through (c).

## INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

Existing law (Public Resources Code Section, 25402(c)) requires the Commission to adopt regulations that prescribe minimum efficiency levels for appliances. The standards must be feasible and cost-effective.

Existing law also requires the Commission to adopt standards for energy efficiency in buildings. (Public Resources Code Sections 25402(a) through (b).)

The Commission first adopted appliance and building standards in the late 1970s and has periodically revised them since then. The Commission's current regulations include provisions on testing of appliances to determine their efficiency, reporting of efficiency data to the Commission, substantive standards establishing minimum efficiency levels, and compliance and enforcement procedures.

Recently, growth in electricity peak demand has strained the adequacy and reliability of California's electricity system. The efficiency standards proposed by the amended regulations and the related data collection are crucial to ensuring California's energy security and reliability. These increased efficiency standards provide important mitigation for California's continued risk of ongoing high electricity prices and outages for all of its citizens.

On September 6, 2000, Governor Davis signed Assembly Bill 970 (Stats. 2000, ch. 329) (AB 970), also known as the California Energy Security and Reliability Act of 2000. AB 970 provides a balanced response to the electricity problems facing the state that will result in significant new investments in environmentally superior electricity generation and in conservation programs. AB 970 directs the Energy Commission to adopt and implement updated and cost-effective appliance and building efficiency standards that result in "maximum feasible reductions in wasteful, uneconomic, inefficient or unnecessary

consumption of electricity,” within 120 days after the effective date of AB 970, or on the earliest feasible date thereafter. (Public Resources Code Section 25553(b).)

The proposed amendments that are the subject of this Notice include two major types of changes. First, in November 1998, well before AB 970 was enacted, the Commission began a rulemaking proceeding to update the appliance regulations to accomplish several important administrative improvements:

- Change the scope of the regulations to accurately reflect federal law
- Update references to test methods, federal statutes and regulations, and other appropriate documents
- Modify certification procedures
- Streamline information submittal and directory publication
- Improve enforcement
- Adopt federal standards in order to provide a back-up in case of elimination or non-enforcement of federal standards
- Change appliance and building standards to ensure consistency and comprehensive coverage
- Other changes to improve clarity of the requirements and to reduce unnecessary burdens

These changes are included in the proposed amendments.

Second, the amendments include proposed changes that would (a) amend the levels of efficiency that the current regulations require for some appliances, and (b) add new appliances to the regulations and establish efficiency requirements (or in some cases, just reporting requirements) for them. The proposed amendments include reporting provisions, labeling provisions, or increased efficiency standards for the following:

- (a) Refrigerators, refrigerator-freezers, and freezers
- (b) Room air conditioners
- (c) Central air conditioners
- (d) Spot air conditioners
- (e) Gas and oil space heaters
- (f) Water heaters
- (g) Pool heaters
- (h) Plumbing fittings
- (i) Plumbing fixtures
- (j) Fluorescent lamp ballasts
- (k) Lamps
- (l) Emergency lighting (exit signs)
- (m) Traffic signal modules
- (n) Luminaires
- (o) Dishwashers
- (p) Clothes washers
- (q) Clothes dryers
- (r) Cooking products and food service equipment
- (s) Electric motors

(t) Distribution transformers

The new or increased efficiency standards, labeling, and reporting requirements for each appliance type are spelled out in detail in the proposed amendments, and the rationale for each amendment is discussed in the Commission's Initial Statement of Reasons for the rulemaking (see "Availability of the Text of the Proposed Amendments and of the Initial Statement of Reasons" below).

## EFFORTS TO AVOID UNNECESSARY DUPLICATION OF FEDERAL REGULATIONS

There is a complex interaction between federal and state regulations on appliances. (See generally 42 U.S.C. Sections 6297, 6316.) The proposed amendments do include some federal standards. However, they do so for only two reasons: (1) to provide all applicable standards, both federal and California, in one convenient place for the reader; (2) to give California the independent authority to enforce the federal standards, which is appropriate because federal enforcement is minimal to non-existent.

## ECONOMIC, FISCAL, AND ENVIRONMENTAL IMPACTS

### Significant Adverse Economic Impact on Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The Commission has made an initial determination that there is no significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed appliance standards will make affected appliances sold or offered for sale in California (thus installed in California) more energy efficient. This means that monthly energy use will be reduced compared to the amount that would be used without these standards. The resulting reduction in energy utility bills is advantageous for California businesses, even with an increase in the first cost of the unit.

Based on industry input, the Commission determined the likely incremental first (purchase) cost of each appliance being considered in the proposed regulations and calculated the incremental life cycle cost of each appliance. A negative number in the life cycle cost column means that the proposed standard for that appliance is cost effective, that is, the energy cost savings exceed the incremental first cost. The larger the negative number, the more cost effective the proposed standard is. The appliance, its likely incremental first cost, and the change in the life cycle cost for each proposed standard are as follows:

<b><i>Appliance</i></b>	<b><i>Incremental First Cost To End-User</i></b>	<b><i>Change In Life Cycle Cost</i></b>
Internal lights in beverage vending machines	\$25	-\$308
Commercial reach-in solid door refrigerators	\$382	-\$958
Commercial reach-in transparent door refrigerators	\$382	-\$594
Commercial air conditioners	\$160	-\$2,580
Residential air conditioners <sup>1</sup>	\$121	-\$184
Emergency lighting (exit signs)	\$20	-\$203
Traffic signals	\$142	-\$13
Torchiere lamps	\$20	-\$404
Commercial clothes washers	\$300	-\$383
Distribution transformers	\$506	-\$3,768
<sup>1</sup> Based on increasing the efficiency from a SEER of 12.0, which is currently being proposed by the U.S. Department of Energy, to a SEER of 13.0 with EER and TXV provisions.		

Impact on the Creation or Elimination of Jobs within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California

The Energy Commission has made the following initial determinations: Adoption of these proposed performance standards for appliances will not create or eliminate jobs within the State. These appliance regulations are not expected to create new businesses, or eliminate existing businesses. These appliance regulations will have no affect on the expansion of businesses in California.

Potential Cost Impact on Private Persons

Only standards for residential central air conditioners and torchiere lamps pose any potential increase in first costs for private persons. The standards for residential air conditioners will cause an increase of \$121 in first cost. The purchaser will save \$184 over the life of the air conditioner. The standards for torchiere lamps will cause an increase of \$20 in first cost. The purchaser will save \$404 over the life of the lamp.

Fiscal Impact on Public Agencies

The Energy Commission has made the following initial determinations:

1. Costs or Savings to State Agencies

The proposed regulations impose no direct requirements on state agencies, though the proposed performance standards for illuminated exit signs, commercial air conditioners, transformers, and traffic signals potentially affect state agencies by requiring that only those units meeting the new standards be purchased and installed in state facilities.

Seventy percent of the sales for exit signs are units that currently meet the proposed standard. The improved signs have a first cost increase of \$20 with a reduced lifecycle cost of approximately \$203.

The proposed standards for traffic signals are set at the level that CalTrans currently requires for state owned and operated traffic intersections. Thus no additional cost to the state is anticipated.

Commercial air conditioners show a first cost increase of \$160 with a \$2,580 reduction of life cycle cost. The standards are cost effective.

Transformer standards show a first cost increase of \$506 and a \$3,768 reduction of life cycle cost. The standards are clearly cost effective.

There are no costs or savings in federal funding to the State.

## 2. Costs and Mandates for Local Agencies and School Districts

The proposed regulations impose no direct requirements on local agencies and school districts.

The proposed performance standards for illuminated exit signs, commercial air conditioners, and transformers potentially affect local agencies and schools by requiring that only those units meeting the new standards are to be purchased and installed in their facilities. The proposed efficiency levels for traffic signals are already in practice in many parts of the state. The standards for traffic signals will cause an increase of \$142 in first cost per module. The purchaser will save \$13 over the life of the signal. The value is very conservative as it does not account for drastically reduced maintenance and labor costs.

## 3. Costs Required to be Reimbursed

There will be no costs to any local agency or school district that are required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4 of the Government Code.

### Effects on Housing Costs

The Energy Commission's initial determination regarding housing costs is that they will only be affected by standards for residential central air conditioners. The increase in first costs is estimated to be \$121. This cost would be passed on to the purchaser of the home by the builder. As noted in the earlier table, due to decreased energy use, this is cost effective to the purchaser.

## Effects on Businesses/Small Businesses

The Energy Commission has made the following initial determinations regarding the effects on businesses and small businesses. The effect on businesses and small businesses should not be significant and can be segregated into three categories, manufacturers of the appliance, retail/wholesale suppliers of the appliance and commercial businesses needing to purchase the appliance.

Manufacturers who must comply with the proposed standards will incur costs to manufacture the new models required by the standard. Their cost will be less than what appears in the chart above, as those costs include estimated dealer mark-ups. California is 10 percent of the U.S. market; therefore, only 10 percent of the manufacturers' production will be required to meet the proposed standards. This should not be a burden for manufacturers. Almost all manufacturers have appliance models that comply with the proposed standards in the marketplace already.

Manufacturers will be required to report the certified efficiency level to the Energy Commission each time they establish a model that will be sold in California. They can report this information either on paper or electronically through a system already established by the Commission. The added cost to manufacturers for reporting efficiency information ranges from \$15 to \$45 per month assuming one to three hours monthly to complete the submittal information at \$15/hour salary. However most manufacturers will report only every few months, as model information does not change often.

The required reporting by manufacturers is necessary for the health, safety, or welfare of the people of California. The increase in appliance efficiency will reduce energy and water consumption, thereby reducing the likelihood of energy or water supply disruptions. The reports assist the Commission in assuring that the efficiency standards are met and those benefits are realized.

Retailers and wholesalers are the next category of businesses that will be affected by the proposed regulations. As noted in the discussion immediately above, models that comply with the standards are already available. California retailers and wholesalers will now need to add to their stock only those models that comply with the new standards. Any appliance that has an increase in wholesale cost will likely have a commensurate increase in retail price. Thus, net change in costs to retailers and wholesalers is expected by this change.

The final category of affected businesses is the commercial business needing to purchase and install the complying appliance model. The increase in first cost to commercial businesses ranges from \$20 to \$506 per the chart in the section pertaining to "Significant Adverse Economic Impact on Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States." Also as noted in this chart, the first cost is more than fully offset by the lifetime energy savings, indicated by negative numbers showing in the increased life cycle cost column of the chart.

## Environmental Impact



There is no significant adverse environmental impact on California. Pursuant to the California Environmental Quality Act, Commission staff has prepared an environmental analysis on the proposed appliance standard changes. The Initial Study, Environmental Checklist, and Proposed Negative Declaration, AB 970 Energy Efficiency Standards for Appliances, Staff Report, Publication Number 400-01-027, November 2001, is available for review and comment.

## ALTERNATIVES

Before it adopts the proposed amendments (or any other regulations), the Commission must determine that no alternative it considered would be more effective in carrying out the purpose for which the regulations are proposed or would be as effective and less burdensome to affected private persons than the proposed amendments. The Commission has found no alternatives to the proposed action that would be more effective in carrying out the purposes of AB 970 without increasing burdens or as effective and less burdensome. The Commission invites the public to suggest alternatives to the proposed amendments.

## AVAILABILITY OF THE TEXT OF THE PROPOSED AMENDMENTS AND OF THE INITIAL STATEMENT OF REASONS

The Express Terms of the proposed amendments, written in plain English, are available at no cost from the Contact Person named below. In addition, the Commission has prepared an Initial Statement of Reasons for the proposed amendments, and it has available all of the information upon which the proposal is based; they are also available at no cost from the Contact Person. The Contact Person will also make available any other documents contained in the rulemaking file, including the environmental documents and the Life Cycle Cost Analysis.

**Documents prepared by the Commission for this rulemaking will be posted on the Commission's website, [www.energy.ca.gov/appliances/documents/index.html](http://www.energy.ca.gov/appliances/documents/index.html).**

## AVAILABILITY OF THE FINAL STATEMENT OF REASONS

Upon completion, the Final Statement of Reasons will be available and copies may be requested from the contact person named in this Notice or may be accessed on the website address listed above.

## CONTACT PERSON

Please contact the following person, preferably by e-mail, for nonsubstantive inquiries about the proposed amendments or to obtain any document relevant to the proceeding, including the Express Terms, the Initial Statement of Reasons, and any other document in the rulemaking file:

Debbie Frieze  
California Energy Commission  
1516 Ninth Street, MS-25

Sacramento, California 95814-5512  
Telephone: (916) 654-4066  
Fax: 916-654-4304  
E-mail: [dfriese@energy.state.ca.us](mailto:dfriese@energy.state.ca.us)

The backup person for documents and nonsubstantive inquiries is Chris Fultz at the same phone number and address. Inquiries regarding the substance of the proposed regulations should be directed to Michael Martin at (916) 654-4039.

In addition, the Commission has a Public Adviser whose function it is to assist the public in participating in Commission proceedings. Please contact her if you have general questions about how to function effectively in the rulemaking:

Roberta E. Mendonca, Public Adviser  
California Energy Commission  
1516 Ninth Street, Mail Station 12  
Sacramento, California 95814-5512  
Telephone: 916-654-4489  
Fax: 916-654-4493  
E-mail: [RMendonc@energy.state.ca.us](mailto:RMendonc@energy.state.ca.us)